REMARKS

Claims 1-33 were rejected as unpatentable over WALLENIUS et al. 6,068,734 in view of ESPY 5,316,623, VINSON et al. 5,958,185 and VINSON et al. 5,611,890. Reconsideration and withdrawal of the rejection are respectfully requested.

The present invention provides a simple process for the preparation of a cellulose-based fibrous web showing a suitable balance of relevant properties such as wet strength, dry strength, softness, bulk and absorbency. As explained on page 2 of the present application, such balance is difficult to achieve since the properties at least partially conflict each other insofar as attempts to improve one property can be detrimental for another.

This technical object is solved in line with present claim 1. Specifically, it can be seen from the comparison between the inventive and the comparative examples provided on page 37 of the present application that the use of a cationic surfactant-based softener in combination with cellulosic fibers having a freeness value of more than 26°SR leads to surprising improvements in terms of wet tensile strength (MD and CD) and bulk (higher thickness) while all other relevant properties are kept at least in the same order.

This is a surprising finding which could not be expected from the prior art cited in the Official Action.

It was correctly outlined in the Official Action that WALLENIUS et al. do not disclose adding an anionic polymer or a softener. WALLENIUS et al. teach on a generic level using chemical pulps which preferably have been beaten to a drainage resistance of at least 20°SR while on the concrete level (column 3, line 57 "between about 20 and about 26°SR") the freeness values are lower than claimed. For this and other reasons explained below, we believe that WALLNEIUS et al., if taken alone or together with the other cited documents, fail to suggest the present invention in which a softener is used in combination with cellulosic fibers having a freeness value of more than 26°SR.

Specifically, we wish to note that the present invention also shows an absolute improvement in terms of wet strength over the examples of WALLENIUS et al. If the wet tensile values measured for the inventive example in "N/50 mm" are recalculated to N/m", values of 230 N/m (MD) and 156 N/m (C/D) are obtained. These values are much higher than reported in Table 2 of WALLENIUS et al. This is surprising and represents one reason speaking against obviousness.

A striking improvement over WALLENIUS et al. is observed in terms of relative wet strength (MD and CD). The most reliable comparison is obtained if the CD values are compared with each other since these are less dependent from the degree of crepe. If correspondingly, the dry strength (CD) values are divided through the corresponding wet strength (CD) values

reported in Table 2 of WALLENIUS et al., it is seen that the relative wet strength ranges from 24 to 29% with an average of about 27%. In line with the table on page 37 of the present application, a relative wet strength (CD) of 42.6% was achieved. This improvement is particularly surprising in view of the fact that the web measured in the present invention also comprised a cationic surfactant-based softener which tends to reduce wet strength.

In this connection, it should be also stressed that it is not recognizable from Table 2 of WALLENIUS et al. that the incorporation of "highly refined" chemical pulp (at least 20°SR) generally has a positive impact on wet strength. Table 2 gives the admix degree of CTMP and HT-CTMP% while the remainder of the paper pulp used was a sulfate type chemical long fiber pulp which was beaten to a freeness of between about 20 and about 26°SR (column 3, lines 28-30 and 45-57). If now the wet strength values for a paper containing 40% HT-CTMP1 (and thus 60% highly refined chemical pulp) and that of a paper containing 54% HT-CTMP1 (and thus 46% highly refined chemical pulp) are compared, it is seen that at least partially the paper containing the higher amount of highly refined chemical pulp, e.g. 60% shows the lower MD wet strength value of for instance 85 N/m. Similar observations can be made for a paper containing 20% HT-CTMP2 (and thus 80% highly refined chemical pulp) and 60% HT-CTMP2 (and thus 40% highly refined chemical pulp). In view of this teaching, it

is not obvious that in line with the present invention the aforementioned improvements in wet strength could be obtained.

Finally, we also believe that WALLENIUS et al. teach away from the present invention as far as the improvement in bulk (thickness) is concerned. WALLENIUS et al. are concerned with a soft paper whose properties have been further enhanced with regard to bulk, as seen from column 1, lines 48-60. However, as technical solution, WALLENIUS et al. teach the incorporation of HT-CTMP. In column 4, lines 56-57 it reads for instance *the bulk of those paper that contain HT-CTMP increase markedly in comparison with the paper-containing standard CTMP at mixture degrees of about 20% and higher.* In contrast thereto, as demonstrated by the comparison provided on page 37 of the present application, the present invention achieved a noticeable improvement in bulk by the use of softener and cellulosic fibers having a freeness value of more than 26°SR in combination with the remaining features of present claim 1.

The two VINSON references cannot render obvious the present invention in light of the above comments. First of all, it should be noted that cellulosic fibers having a freeness value of more than 26°SR are not disclosed in these references and therefore the benefit of their combined use with softener (and the other elements of present claim 1) could not be expected from these documents solely for this reason. Moreover, the technical objects of the present invention and those of VINSON differ

completely. Both VINSON references are concerned with the replacement of wood pulp in sanitary tissue with a low cost, readily available filing material such as kaolin clay or calcium carbonate (VINSON '185, column 2, lines 39-42 and VINSON '890, column 2, lines 42-45). Correspondingly, the VINSON references evaluate properties such as tensile strength, opacity, lint and softness of filler-containing papers over filler-free papers of the prior art (see for instance the table bridging columns 38 and 39 of VINSON '890). This comparison allows no conclusions regarding the improvements achieved with the present invention.

In view of the foregoing remarks, it is believed that the present application is in condition for allowance, which is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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